

NEW TAXA OF RUBIACEAE FROM VENEZUELA

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ABSTRACT

Four new taxa of Rubiaceae are described from Venezuela: *Coccocypselum apurense*, *Faramea cazaderensis*, *Psychotria buntingii*, and *Psychotria subimbricata*.

***Coccocypselum apurense* Steyerm., sp. nov.** TYPE: Venezuela. Edo. Apure: Dtto. Pedro Camejo, Caño El Cabello, 16 airline km NW of Mata de Guanabana, between the Río Meta and Río Cinaruco, 6°19'N, 68°19'W, 75 m, 27 Feb. 1979, *Gerrit Davidse & Angel Gonzalez 15825* (holotype, MO; isotype, VEN).

Herba radicans, caulibus 1.5–2.5 mm diam. glabris; stipulis subulatis usque 6 mm longis glabris; foliis petiolatis, petiolis 8–13 mm longis marginibus superioribus adpresso-piloso-ciliatis ceterum glabris; laminis ovatis apice breviter acutis vel subacutis basi obtusis vel subobtusis majoribus 6–7 cm longis 3–4 cm latis, adultis supra costa adpresso-pilosa atque marginibus minute adpresso-ciliolatis, pilis 0.1–0.3 mm longis munitis, ceterum glabris, subtus glabris, juvenilibus subtus costa nervisque lateralibus pilosis, nervis lateralibus utroque latere ca. 7 adscendentibus subtus impressis; inflorescentia ca. 12-flora subcapitata pedunculata; pedunculo 4.5 mm longo glabro; calycis lobis inaequalibus lineari-lanceolatis 2–2.5 × 0.3–0.7 mm; corollis coeruleis 5 mm longis extus glabris.

Creeping herb with rooting glabrous stems 1.5–2.5 mm diam. Stipules subulate, to 6 mm long, glabrous. Leaves petiolate, appressed-pilosulous on upper margins, otherwise glabrous; leaf blades ovate, shortly acute or subacute at apex, obtuse or subobtuse at base, the larger ones 6–7 cm long, 3–4 cm wide; adult leaf blades appressed-pilose adaxially on midrib, minutely appressed-pilosulous on margins with hairs 0.1–0.3 mm long, elsewhere glabrous, abaxially glabrous; young leaf blades pilose abaxially on midrib and lateral nerves; lateral nerves ascending, 6 or 7 each side; petioles 8–13 mm long. Inflorescence ca. 12-flowered, subcapitate, the heads 8 mm wide, 5 mm high, pedunculate; peduncle 4.5 mm long, glabrous. Flowers sessile; bracts subtending flowers linear-ligulate, obtuse, 3 mm long, 0.5 mm wide, glabrous; hypanthium campanulate, 1.5 mm long, 1.1 mm wide, glabrous; calyx lobes unequal, linear-lanceolate, acute, the larger pair 2.5 mm long, 0.7 mm wide, the smaller pair 2

mm long, 0.3–0.5 mm wide, sparsely ciliolate to glabrescent; corolla blue, infundibuliform, 5 mm long, glabrous without, tube 2 mm long, 1.2 mm wide, glabrous within, the lobes ovate-oblong, subacute, 2 mm long, 1.5 mm wide, papillate-puberulent within. Anthers slightly exerted, linear, 2 mm long. Style exerted, 6 mm long.

This species resembles the newly described *C. croatii* Steyerm. but is readily distinguished from that taxon by the longer petioles, very short peduncles, less conspicuous, shorter hairs of the ciliate-margined leaf blades, shorter stipules, inflorescences with more flowers, and fewer lateral leaf veins that are less arcuate.

***Faramea cazaderensis* Steyerm., sp. nov.** TYPE: Venezuela. Edo. Táchira: Dtto. Lobatera, La Cazadera, 2,000 m, 22 Jul. 1983, *H. van der Werff & R. Ortiz 5457* (holotype, MO; isotype, VEN).

Frutex 4-metralis, ramis juvenilibus quadrangulibus glaberrimis; foliis sessilibus subamplexicaulibus oblongis vel ovato-oblongis apice abrupte obtuse acutis basi subcordatis vel rotundatis 6.5–13 cm longis 3.5–7 cm latis prominente nervatis, nervis lateralibus utroque latere 9–12 fere horizontalibus; inflorescentia terminali umbellatim cymosa, floribus pedicellatis, pedicellis 2.5–4 mm longis; calyce hypanthioque 5.5 mm longo, hypanthio urceolato 1 mm longo; calyce tubuloso 4.5 mm longo inaequaliter leviterque dentato, dentibus deltoideis acuminatis 0.3–1 mm longis, deinde uno latere fisso.

Shrub 4 m tall, glabrous throughout; branches quadrangular. Stipular sheath shallowly and broadly semilunar, 3 mm long, 2 mm wide, ending in an awn 2–3 mm long. Leaves sessile, subamplexicaul, oblong or ovate-oblong, abruptly obtusely acute at apex, subcordate or rounded at base, 6.5–13 cm long, 3.5–7 cm wide, prominently nerved; lateral nerves 9–12 each side, nearly horizontal or widely spreading at an angle of 5–15°, elevated abaxially, impressed adaxially, anastomosing 3–6 mm before the margin, ter-

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tiary veins prominently reticulate, marginal nerves somewhat thickened; petioles 2–3 mm long. Inflorescence terminal, umbellately cymose, 2–2.5 cm wide, 1.5–1.7 cm high, 12–15-flowered, pedunculate; peduncle erect, 1.7–4 cm long, 1 mm wide; primary axes 4–5, ascending, 5–7 mm long, 0.7–0.9 mm wide, each bearing 3 flowers. Flowers on pedicels 2.5–4 mm long, 0.5–0.7 mm wide; bracts subtending axes and pedicels deltoid-ovate, acute, 0.5–0.8 mm long. Calyx and hypanthium 5.5 mm long; hypanthium urceolate, 1 mm long; calyx tubular, 4.5 mm long, shallowly and unequally dentate, teeth broadly deltoid, acute to acuminate, 0.3–1 mm long, eventually splitting on one side. Corolla purple (in bud), abruptly acute, 7 mm long.

Paratypes. VENEZUELA. EDO. TACHIRA: Dito. Lobatera, La Cazadera, 7°55'N, 72°18'W, 1,600 m, 24 Jul. 1983, *van der Werff & Ortiz 5587* (MO, VEN); Parque Cazadero, Quebrada Cazadero, 16 km NW of San Cristóbal, 7°54'N, 72°18'W, 400–650 m, 2 May 1981, *Liesner & Guariglia 11668* (MO, VEN).

This species is well marked by the subamplexicaul leaves and relatively few-flowered umbellate inflorescence. It may be distinguished from *F. sessilifolia* (Kunth) A. DC. by the umbellately disposed, smaller inflorescence of 4 or 5 axes, each of which is only 3-flowered, the obtusely acute leaves with fewer pairs of lateral nerves, and by the tubular, longer calyx which becomes split on one side. Further, the habitat of the new taxon in the cooler montane forests of the Andes of Táchira is in contrast with that of *F. sessilifolia* in the lowlands of the Orinoco, Río Negro, and Madeira river basins.

Psychotria buntingii Steyermark., sp. nov. TYPE: Venezuela. Edo. Zulia: Dto. Perijá, alrededores de la Estación Hidrológica Aricuaisá-Pie de Monte, 9°35'N, 72°53'55"W, en zona de bosque siempreverde, 100–250 m, 25 Feb.–3 Mar. 1982, *G. S. Bunting, G. Panapera & H. Lobo 10876* (holotype, MO; isotypes, JBM, VEN).

Suffrutex 0.3-metralis, ramis minute tomentellis; stipulis terminalibus lanceolatis acutis usque 5.5 mm longis; foliis elliptico-lanceolatis apice subfalcato-acuminatis basi acutate angustatis 4.5–8.5 cm longis 0.9–1.9 cm latis supra glabris subtus costa nervis lateralibusque minute puberulentibus, nervorum lateralium axillis domatiis barbellatis, ceterum glabris, subtus punctis brunneis minute notatis, marginibus sparsim ciliolatis; inflorescentiis axillaribus vel terminalibus pedunculatis cymoso-umbellatis gracillimis sub anthesi 0.4 cm alto 1.2 cm lato sub fructu 1.2 cm alto 2 cm lato, 12–

17-floris, axibus primariis tribus filiformibus 3–7-floris; pedunculo filiformi 1.6–2 cm longo 0.5 mm lato dense puberulo; floribus pedicellatis, pedicellis 0.5–0.8 mm longis 0.3–0.4 mm crassis; calyce hypanthioque 1.5 mm longo, hypanthio turbinato 0.5 mm longo 0.5 mm lato; calyce 1.2 mm longo, tubo 0.5 mm longo 1 mm lato; corolla (immatura) 3.5 mm longa.

Slender subshrub; branches minutely tomentellose with numerous minute cystoliths. Terminal stipule and those on next lower node lanceolate, acute, up to 5.5 mm long, 1.5 mm wide, glabrous or glabrate except for the ciliate margins, prominently marked with pale cystoliths near margins, nodes below brown-fimbrillate on the stipular scar. Leaf blades elliptic-lanceolate, subfalcately acuminate at apex, acutely narrowed to the base, 4.5–8.5 cm long, 0.9–1.9 cm wide, 4¼–4½ times longer than broad, glabrous adaxially, minutely puberulent abaxially on midrib and main lateral nerves, otherwise glabrous, the surface minutely brown-dotted, axils of the nerves abaxially barbellate with domatia, margins sparsely ciliolate; lateral nerves 7–8 each side, ascending at an angle of 45°, faintly anastomosing 1.5–2 mm from margin; petiole very slender, 4–7 mm long, moderately tomentellose. Inflorescence axillary or terminal, cymosely umbellate with 3 main axes, 12–17-flowered, 0.4 cm high, 1.2 cm wide in anthesis, 1.2 cm high, 2 cm wide in fruit, pedunculate, the main axes with two additional shorter central axes 1 mm long; main axes filiform, the lateral 3–7-flowered. Peduncle 1.6–2 cm long, 0.5 mm wide, densely puberulent and conspicuously marked with cystoliths. Flowers pedicellate, pedicels filiform, 0.5–0.8 mm long, 0.3–0.4 mm thick; bract subtending pedicel subulate, 0.2 mm long. Calyx and hypanthium 1.5 mm long, the hypanthium turbinate, 0.5 mm long, 0.5 mm wide, tomentellose; calyx tube 0.5 mm long, 1 mm wide, lobes glabrous throughout except for ciliolate margins, longer than the tube. Corolla white (in bud) cylindrical-infundibuliform, 3.5 mm long, glabrous without, sparsely pilose within the tube, sparsely marked with cystoliths, tube 1 mm long, lobes 2 mm long. Fruit (immature) elliptic-oblong, 3 mm long, 2 mm wide, sparsely puberulent.

This species resembles the pubescent *P. horizontalis* var. *glaucescens* (Kunth) Steyermark., from which it is readily distinguished by the minute calyx and hypanthium, shorter, filiform peduncles and pedicels, much smaller inflorescence, and narrowly elliptic-lanceolate leaf blades with barbellate domatia in the abaxial nerve axils.

It is a pleasure to associate this new taxon with the name of Dr. George S. Bunting, who has contributed greatly to our knowledge of the flora of the state of Zulia in Venezuela.

Psychotria subimbricata Steyerm., sp. nov. TYPE: Venezuela. Edo. Miranda: Parque Nacional Guatopo, laderas pendientes pedregosas a lo largo del Río Santa Cruz de Río Grande, lado occidental de la carretera, al sureste de Los Alpes, 10°4'45"N, 66°29'30"W, 400 m, 31 Oct. 1981, *Julian A. Steyermark & Bruno Manara 125483* (holotype, VEN).

Planta subherbacea 1.5-metralis; foliorum laminis subtus glabrescentibus, nervio medio subtus minute puberulo; inflorescentiae pedunculo 1–6 cm longo, bracteis bracteolisque subimbricatis glabris; hypanthio glabro.

Stem subherbaceous, simple, hollow, leafy below, 1.5 m tall. Stipule spreading with revolute margins, broadly ovate-oblong, subacute, 6–10 × 6–8 mm. Leaves broadly obovate or elliptic-obovate, abruptly and shortly acute to shortly acuminate or obtusely acute at apex, conspicuously narrowed to the decurrent base, the lamina 21–25 cm long, 10–15 cm wide; lower midrib microscopically appressed-puberulent, the middle and upper portion with two parallel lines of puberulence along the margins of the midrib; abaxial surface glabrous to glabrescent; adaxial surface glabrous; lateral nerves 13–16 each side, arcuate-ascending, arising at angle of 15–20°, strongly sulcate adaxially, elevated abaxially; decurrent

petiole 3–8 × 5 mm. Inflorescence axillary in upper leafy axils and in leafless middle axils, fasciculate with 1–3 elongated peduncles 1–6 cm long, glabrous, trichotomously branched at maturity with the central longer axis up to 13 mm long and two lateral shorter axes up to 7 mm long, or the peduncle with two lower axes and an upper trichotomously branched portion; 2 bracts subtending the base of the principal axes naviculate, lanceolate to ovate-lanceolate, acute to acuminate, 7–9 mm long, 4–5 mm broad near base, glabrous. Flowers in small compact groups subsPICATELY arranged, each group subtended by imbricate, ovate, obtuse, glabrous bracts 6.5 × 4 mm; flowers numerous in an inflorescence, 3 or 4 of them subtended by a larger, glabrous, ciliolate bract in each compact group. Calyx lobes 5, narrowly ligulate, unequal, subobtuse, ciliolate, 3–3.5 × 0.4–0.6 mm; calyx tube and hypanthium 2 × 1.5 mm, glabrous; 1 scale-like squamella, oblong-triangular or lanceolate, acute, in the sinus between 2 calyx lobes; corolla tubular, 7 mm long, glabrous except for the barbate orifice. Anthers exerted, oblong, 1.2 mm long. Style 3.5 mm long; style branches filiform, 1.3 mm long, puberulous.

The new taxon differs from *P. humensis* Steyerm. and *P. decurrens* Steyerm. in the glabrous hypanthium, more branched inflorescence with longer peduncles, glabrous, subimbricately arranged bracts and bracteoles, and minutely puberulent lower midrib of a glabrescent abaxial leaf surface.